

Abstract of the Disclosure

A material defect evaluation apparatus using positron for evaluating the degree of deterioration of a specimen by measuring a positron lifetime after irradiating positron to the specimen, includes: a positron source, a positron detector and a  $\gamma$ -ray detector, wherein, the positron source and the positron detector are arranged in a container through which a light is not transmitted, and, a positron transmitting window, through which positron emanating from the positron source and transmitting through the positron detector is transmitted outward, is arranged to the container.